UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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REGIONAL
ADMINISTRATOR'S
DIVISION

March 7, 2022

Michael Erickson, Chief
Environmental Compliance Section
U.S. Army Corps of Engineers, Walla Walla District
ATTN: PPL-C, LSR Navigation Channel Maintenance
201 North 3rd Avenue
Walla Walla, Washington 99362-1876

Dear Mr. Erickson:

The US Environmental Protection Agency has reviewed the US Army Corps of Engineers, Walla Walla District proposal to prepare an Environmental Assessment for the Lower Snake River Navigation Channel Maintenance Project (EPA Region 10 Project Number 22-0007-USACE). EPA conducted its review pursuant to the National Environmental Policy Act and our review authority under Section 309 of the Clean Air Act.

The proposed Environmental Assessment for the project will tier to the 2014 Lower Snake River Programmatic Sediment Management Plan/Final Environmental Impact Assessment. The NEPA analysis will evaluate potential environmental impacts associated with dredging near the confluence of the Snake and Clearwater Rivers. The purpose of this proposed action is to reestablish the Congressionally authorized dimensions of the federal navigation channel and operate the Lower Granite Reservoir at minimum operating pool during juvenile salmonid outmigration. The action will include disposal of 250,000 to 400,000 cubic yards of dredged material, primarily sand, to six potential locations (3 upland, 3 in-water).

EPA supports the overall project purpose, recognizing the immediate need to dredge problem sediment for improved commercial navigation in the Lower Snake and Clearwater. To minimize the project's environmental impacts, EPA recommends the NEPA analysis evaluate and compare project alternatives to assess direct, indirect, and cumulative effects of the project. The enclosed detailed comments provide recommendations on specific topics for the project's NEPA analysis.

Thank you for the opportunity to comment on this proposal early in the NEPA process. If you have questions about our comments, please contact Theo Mbabaliye of my staff at (206) 553-6322 or at mbabaliye.theogene@epa.gov, or me at (206) 553-1774 or chu.rebecca@epa.gov.

Sincerely,

Rebecca Chu

Digitally signed by Rebecca Chu
Date: 2022.03.07 14:33:55 -08'00'

Rebecca A. Chu, Chief
Policy and Environmental Review Branch

U.S. EPA Detailed Comments on the
Lower Snake River Navigation Channel Maintenance Project
Asotin, Whitman, and Franklin Counties, WA and Nez Perce County, ID

Impacts to Environmental Resources

Potential Impacts to Surface Water Quality

The Clean Water Act §303(d) requires States and Tribes with EPA-approved Water Quality Standards to develop water quality restoration plans (Total Maximum Daily Loads) for water bodies that do not meet the WQS. EPA recommends that the NEPA analysis include the following:

- Impacted waters, the nature of the impacts, and specific pollutants likely to affect those waters.
- River reaches potentially affected by the project that are listed on the State's most current EPA-approved CWA §303(d) list. For these reaches, evaluate the potential direct, indirect, and cumulative impacts to WQS and associated water quality criteria. Consider focusing on the potentially significant threats to water quality in these systems from existing conditions and proposed management actions.
- Existing restoration and enhancement efforts for potentially impacted waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures to reduce impacts to surface waters of the Unites States. Include compensatory mitigation under the CWA.
- Explain how the project will meet the antidegradation provisions of the WQS. These provisions prohibit degrading water quality within water bodies that currently meet the WQS.
- Include water quality monitoring data collected for compliance with existing CWA 401 certifications for the project area, and specifically identify when WQS exceedances have occurred and/or when dredging or placement was slowed/stopped due to turbidity issues. For example, in 2005/2006 dredging and in-water placement projects, turbidity issues caused work to be slowed or stopped due to exceedances of turbidity WQS at both dredging and placement locations.

Sediment Assessment and Quality

Sediment Characterization - Quantity and Transport

Sediment transport monitoring and modeling should yield results with sufficient precision to forecast sediment delivery and future maintenance dredging needs within the project area. The EPA recommends that the NEPA analysis include the following:

- Sediment transport monitoring and modeling that has been performed by the Corps and others to support the current proposed action.
- Description of interagency coordination and work that has been performed per the Programmatic Sediment Management Plan since 2014. Previous assessments identified sources and trends in watershed sediment delivery to the project area. Of particular interest is identification of upstream locations where reductions in sediment delivery can and have been made, and that differentiates between human-induced and background yields.
- Description of upland sediment reduction measures by the Corps and others in the Snake River watershed as was anticipated in the 2014 PSMP. Of particular interest is US Forest Service activity in the Salmon River watershed.

Sediment Quality

EPA supports the beneficial use of sediment dredged from the federal channel and Port berthing areas. The study or review of existing information can improve understanding of locations and quantities of sediment suitable for beneficial use and allow the matching of sediment sources with use locations. Current dredged material evaluations in the project area follow Dredged Material Management Program User Manual guidelines. Dredged material in project area shoals was last sampled in September/October 2019, and those data are summarized in a DMMP Suitability Determination Memo dated April 30, 2020. At that time, the Corps also sampled the potential beneficial use location at Bishop Bar (River Mile 118). EPA recommends the NEPA analysis include the following:

- Updated conventionals, chemistry and bioassay characterization information for the dredging prism, and for placement sites where available. Compare these data to freshwater guidance values from the DMMP User Manual, bioassay interpretive guidelines, and to Washington State freshwater sediment quality guidelines.
- A specific assessment of conventionals' data, especially grain size data, from the various areas of the dredge prism. Grain size data can inform dredging and placement sequencing related to in-water beneficial use and suitability for upland disposal options.
- A thorough discussion on the anticipated preferred beneficial use alternative, including all information about the location, quality, quantity, and sequencing of the proposed placement.
- A discussion of all water quality monitoring and in-situ habitat monitoring data from previous beneficial uses that are similar to the preferred beneficial use alternative.

Aquatic Resources, Riparian Areas, and Wetlands

EPA recommends the NEPA analysis include the following:

- Description of all waters of the U.S., including wetlands and any navigable waters in the analysis area. Provide maps, pathways of alternatives, and resources likely to be impacted by the project. Include acreages and channel lengths, habitat types, values, and completed functional assessments of these waters.
- Alternatives that avoid, minimize, and/or otherwise mitigate unavoidable adverse environmental impacts, thus maximizing environmental benefits.
- An evaluation of the project impacts, including beneficial impacts of restoration, on aquatic resources from each action alternative. Include in this evaluation analysis of the cumulative effects of channel and near shore/wetland modifications in the project area to determine the significance of their effects in the lower Snake River watershed. Take into consideration the factors that will be used to evaluate the alternatives under the CWA §404(b)(1) Guidelines such as quantifying any adverse impacts and the practicability of each action alternative.
- Identification of where adverse impacts cannot be avoided, include minimization measures such as best management practices (e.g., work window timing, turbidity management).
- Description of mitigation planning, including compensatory mitigation, if required, to address unavoidable adverse impacts to waters of the U.S.
- Description of coordination with state water quality and other relevant resource agencies working in the planning area, such as the Washington Departments of Ecology and Fish and Wildlife, National Marine Fisheries Service, and Idaho Departments of Environmental Quality and Fish and Game. Coordination with the Ports of Lewiston and Clarkston will also be

important as the project is developed and implemented due to their CWA §404 and Rivers and Harbors Act §10 compliance for their required channel maintenance actions.

- Description of floodplain impacts and actions to be taken to minimize the impacts, consistent with CWA §404 and Executive Order 11988, *Floodplain Management.*[1]
- Description of potential impacts to federally and state protected species and their habitat. The project may result in water quality alterations in affected river reaches (e.g., effects on in-stream water quality parameters, including sediment disturbance that can impact parameters such as turbidity, dissolved oxygen, temperature, removal of foraging habitat, etc.) that impact Endangered Species Act listed species. Include identification of listed species occurring within the project area; critical habitat(s); and impacts the project will have on the species and their critical habitat(s). Explain how the project will meet the ESA requirements, including consultation with the United States Fish and Wildlife Service and National Marine Fisheries Service. This may include preparing a biological assessment. It will also be important to coordinate with Idaho Fish and Game to define conservation practices for state protected species.

Hazardous Materials and Wastewater Management

EPA recommends the NEPA analysis include the following:

- Describe measures that will be taken to minimize accidental spills or release of pollutants in the environment, including emergency response steps that will be followed should an accident occur.
- Describe how the applicability of state and federal hazardous materials, pollution prevention, and solid waste requirements, and appropriate mitigation measures to prevent and minimize the generation of hazardous materials will be addressed.
- Assess the need to prepare and implement a Spill Prevention, Control, and Countermeasure and provide information addressing this SPCC.[2]

The proposed action may result in direct, indirect, and cumulative impacts to environmental resources, due to use of hazardous and non-hazardous materials. It is possible that during dredging, hazardous materials such as compressed gas, petroleum products, and others may be used and/or stored in the project area. Although proper management is presumed to be safe, concerns remain about the possibility of accidents resulting in their release to the environment.

Impacts of Climate Change and Climate Resiliency

EPA recommends that the NEPA analysis include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed project, and what impacts the proposed project will have on climate change consequences. This could help inform the development of measures to improve the resilience of the project. If projected changes could notably exacerbate the environmental impacts of the project, EPA recommends these impacts also be considered as part of the NEPA analysis.

As indicated in the 2014 PSMP/EIS, large sources of sediment in this system include failing forest roads, wildfire areas, or a combination of the two where large mass wasting events occur. PSMP studies showed sand from the Salmon River watershed is a potential long-term source. As these types of events are likely to increase due to a changing climate, EPA recommends the NEPA analysis include a

[1] https://www.epa.gov/cwa-404/floodplain-management-executive-order-11988
[2] https://www.epa.gov/sites/production/files/2014-04/documents/b_40cfr112.pdf

discussion of these events and implications of sediment reduction measures and influences from the watersheds upstream of the project area.

Describe the anticipated changes to the watershed in terms of quantity and timing of snowpack, wildfires, mass wasting events, runoff and sedimentation, and precipitation and how these changes may impact the project area hydrology, sediment inputs and operations. Include impacts to water temperature, flow, sediment volumes and transport, and beneficial uses. EPA recommends discussing the potential synergistic effects of the impacts and changes that will result from alternatives considered for this project. For example, the NEPA analysis could consider the synergistic effects of changes in timing and quantity of flows combined with increased air temperatures under climate change and impacts to fish and their habitats.

Potential Air Quality Impacts

Because the proposed action may result in impacts on air quality, EPA recommends the NEPA analysis include the following:

- Detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards and criteria pollutant non-attainment and maintenance areas in the analysis area and vicinity, if applicable.
- Estimation of criteria pollutant emissions for the analysis area and discuss the timeframe for release of these emissions from construction through the lifespan of the proposed project. The NEPA analysis should specify all emission sources and quantify related emissions.
- Specific information about pollutants from mobile sources, stationary sources, and ground disturbance.
- A Construction Emissions Mitigation Plan that identifies actions to reduce diesel particulate, carbon monoxide, hydrocarbons, and oxides of nitrogen (NOx).
- Potential effects from air pollutants, including air toxics, to workers, ground crews, nearby residents, and any sensitive receptor locations, such as outdoor recreation areas (e.g., parks, trails, etc).

Cumulative Effects

EPA has issued guidance on how to provide comments on the assessment of cumulative impacts, *Consideration of Cumulative Impacts in EPA Review of NEPA Documents.*[3] The guidance states that to assess the adequacy of the cumulative impact assessment, there are five key areas to consider:

- Resources, if any, that are being cumulatively impacted.
- Appropriate geographic area and the time over which the effects have occurred and will occur.
- All past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern.
- A benchmark or baseline.
- Scientifically defensible threshold levels.

[3] https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf

Because sediment delivery occurs from uplands that may be a mix of private, tribal, state, and federally owned areas, it is important for the NEPA analysis to assess cumulative impacts across jurisdictions to disclose the sum of individual effects of all projects on the local environment. Cumulative effects analysis also considers appropriate mitigation strategies to minimize adverse and enhance beneficial effects.

Coordination with Other Land Management Agencies

Because of the nature of the project area and sediment reduction and management issues, it will be important for the Corps to coordinate its dredging activities with other federal, state, and tribal land management agencies throughout the project watershed. A thorough understanding of past assessment and planning efforts at various scales is critical to understanding key areas and types of actions producing significant sediment loads and the types of actions targeted for reducing sediment loads in rivers, thus, reducing the need and frequency to dredge problem sediment.

Environmental Justice

The NEPA analysis will need to address the potential for disproportionate adverse impacts to communities with environmental justice concerns as required under Executive Orders 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and 14008, Tackling the Climate Crisis at Home and Abroad (January 27, 2021)*.[4,5] The latter requires agencies to make achieving environmental justice part of their mission by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related, and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.

To identify where EJ concerns exist, EPA suggests using two tools: Environmental Justice Screening and Mapping Tool (EJScreen) and Climate and Economic Justice Screening Tool (CEJST).[6,7] EPA considers a project to be in an area of potential EJ concern when an EJScreen analysis for the impacted area shows one or more of the twelve EJ Indices at or above the 80th percentile in the nation and/or state. At a minimum, EPA recommends an EJ analysis consider EJScreen. The CEJST can be used to assist Federal agencies in identifying and defining disadvantaged communities for the purposes of the Justice40 Initiative. With CEJST, USACE could, for example, consider census tracts identified as 'disadvantaged' and determine disproportionate impacts by the project. EJScreen and CEJST are complementary tools.

For the proposed project, the one-mile radius could be the area within a mile of the river reaches to be dredged, dredged material placement sites, or other benchmarks. Areas of impact can be a single block group or span across several block groups and communities. When assessing large geographic areas, consider the individual block groups within the project area in addition to an area wide assessment. Important caveats and uncertainties apply to this screening-level information, especially in rural areas, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. As the screening tools do not provide data on every environmental impact and demographic factor that may be relevant to a particular location and/or proposed project, consider additional information in an EJ analysis to supplement EJScreen and CEJST outputs. Further, EPA recommends

[4] https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf
[5] https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad
[6] https://www.epa.gov/ejscreen
[7] https://screeningtool.geoplatform.gov/en/

that other vulnerable and disadvantaged populations, such as, the elderly, the disabled, and children be included in the analysis.[8]

For additional information on EJ analysis for the project, USACE may also consult the Federal Interagency Working Group on Environmental Justice and NEPA Committee report, *Promising Practices for EJ Methodologies in NEPA Reviews*, particularly on determining whether the proposed project may result in disproportionately high and adverse impacts.[9] Other resources that may be of interest during EJ analysis include, but are not limited to, the following:

- Explore the Resilience Analysis and Planning Tool (RAPT).[10]
- Explore the National Risk Index for Natural Hazards.[11]

Consultation with Tribal Governments

EPA encourages USACE to consult with the Tribes when making decisions regarding the project. EPA recommends the NEPA analysis describe the issues raised during the consultation, and how those issues were addressed. See Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments.*[12] As a resource, EPA also recommends consulting the document, *Tribal Consultation: Best Practices in Historic Preservation*.[13]

EPA notes that several tribal entities may be affected by the project, including the Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Colville Reservation, the Nez Perce Tribe, and the Wanapum Band, as well as other tribal entities. As all these tribes have interest in the planning area waterbodies, fisheries, and cultural and archeological resources, EPA recommends that they be consulted as the project is developed and implemented.

Range of Alternatives

Identify a range of alternatives that avoid, minimize, and compensate for impacts to water, air, wildlife, and other resources. The Council on Environmental Quality recommends that all reasonable alternatives be considered, even if some of them could be outside the capability of the applicant or the jurisdiction of the agency preparing the NEPA document. EPA encourages selection of alternatives that protect, restore, and enhance the environment.

Monitoring and Adaptive Management

The proposed project may impact a variety of resources for an extended period, including potential impacts to water quality, fish, wildlife and plants, and habitat throughout the local watershed. This may include both short-term impacts such as during dredging and placement, and long-term viability such as at an in-water beneficial use site. EPA recommends the NEPA analysis include:

- An environmental inspection and monitoring program to ensure compliance with all mitigation measures and assess their effectiveness.

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[8] https://www.epa.gov/laws-regulations/summary-executive-order-13045-protection-children-environmental-health-risks-and-safety-risks

[9] https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf

[10] https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool

[11] https://www.fema.gov/flood-maps/products-tools/national-risk-index

[12] https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/Req-EO13175tribgovt.pdf

[13] http://npshistory.com/publications/preservation/tribal-consultation.pdf

- Description of the monitoring program and effectiveness measures. This will provide opportunity to adjust the project as needed to meet environmental objectives throughout the life of the project.
- Description of a mechanism to consider and implement additional mitigation measures.
- Monitoring questions that will be used to inform the adaptive management process.
- A definition of success and how it will be measured. This should include both short-term construction elements, and a long-term monitoring plan for the upland and/or in-water placement preferred alternative.
- Information to determine whether management direction is being followed, whether desired results are being achieved, and whether underlying assumptions are valid.
- Lessons learned from past practices in managing similar projects, particularly since the 2014 PSMP, combined with the need to account for new challenges, such as climate change, be incorporated into the NEPA document to help inform the design and management of the currently proposed project.